

CLAIMS

What is claimed is:

1. A microwave oven, comprising:
a weight sensing unit to sense a weight of food;
a memory to store weight information of the food;
an input unit to set a mode to measure the weight of the food and a mode to store the measured weight of the food; and
a controller to store the weight of the food measured through the weight sensing unit in the memory when the weight measurement and storage modes are set through the input unit, and to calculate a cooking time depending on the weight of the food stored in the memory when cooking is performed.
2. The microwave oven according to claim 1, further comprising:
a display unit to display the weight of the food, a calorie content of the food, a cooking time, and to set various cooking conditions.
3. The microwave oven according to claim 1, wherein the input unit sets a calibration point to zero for the weight sensing unit, and the controller comprises:
an internal memory to store zero point calibrated weight information of the food.
4. The microwave oven according to claim 3, wherein the controller calculates the weight of the food by subtracting a weight of a container from a total weight including the weight of the container filled with the food when the zero point is calibrated through the input unit.
5. The microwave oven according to claim 1, wherein the memory is an Electrically Erasable and Programmable Read Only Memory (EEPROM) in which stored weight information of the food may be continuously held when power is turned off.
6. The microwave oven according to claim 1, wherein the controller comprises:
a counter to count a predetermined period of time for which a cooking start is not set, and deletes the weight information of the food stored in the memory when the time counted by the counter exceeds a set time.

7. The microwave oven according to claim 1, wherein the weight sensing unit comprises:

a weight sensor installed in an upper portion of a body of the microwave oven, and having a fixed one end, wherein the weight sensor senses a weight of the food depending on a force applied to a free end thereof.

8. The microwave oven according to claim 1, wherein the input unit comprises:
a first setting key to set the mode of measuring the weight of the food; and
a second setting key to set the mode of storing the weight of the food.

9. The microwave oven according to claim 8, wherein the first setting key is used to set a mode of searching a previously arranged table for a calorie content of the food and to display the calorie content.

10. The microwave oven according to claim 1, further comprising:
a platform unit mounted on the weight sensing unit to place an object filled with the food thereon, so that a weight of the object is measured by the weight sensing unit.

11. The microwave oven according to claim 10, wherein the platform unit comprises:
a platform base to integrate with a portion of the microwave oven;
a rubber seat to provide a plate to receive the object thereon and the width of the object to be measured; and
a locking ring to fix the rubber seat to the platform base.

12. The microwave oven according to claim 7, wherein the weight sensing unit further comprises:
a support bracket provided at the one end of the weight sensor to support the weight sensor;
a shaft fixed to the free end of the weight sensor to receive the force applied to the free end;
at least one heat dissipating hole provided in the weight sensor to allow the free end of the weight sensor to be bent and protected against heat; and

sensing elements mounted on surfaces of a center portion of the weight sensor to contract and expand so that internal resistances thereof vary.

13. The microwave oven according to claim 12, wherein the sensing elements apply a weight sensing signal to the controller to correspond to the varied resistances.

14. The microwave oven according to claim 5, wherein the input unit comprises:
a cooking start key to set a cooking start;
a thawing key to set a thawing mode;
a weight key to set a weight measurement mode;
a zero point calibration key to set a calibration point to zero; and
a hold key to store the measured weight of the food.

15. The microwave oven according to claim 1, further comprising:
a magnetron driving unit to drive a magnetron of the microwave oven based on the control of the controller, performing cooking in the microwave oven by irradiating microwaves.

16. The microwave oven according to claim 14, wherein the weight of the food is stored in the first memory by pressing the hold key.

17. A method of controlling a microwave oven having a weight sensing unit to sense a weight of food, the method comprising:
determining whether a weight measurement mode is set to measure a weight of the food;
determining whether a weight information storage mode is set to store weight information of the food if the weight measurement mode is set; and
storing a weight of the food measured using the weight sensing unit if the weight information storage mode is set.

18. The microwave oven control method according to claim 17, further comprising:
determining whether a cooking start is set to perform cooking;
calculating a cooking time to correspond to the stored weight of the food if the cooking start is set; and
performing cooking for the calculated cooking time.

19. The microwave oven control method according to claim 17, further comprising:
calibrating a zero point for the weight sensing unit;
calculating the weight of the food after the zero point calibration;
storing and displaying the calculated weight of the food;
calculating a cooking time to correspond to the calculated weight of the food; and
performing cooking for the calculated cooking time.

20. The microwave oven control method according to claim 19, wherein the weight of the food calculated after the zero point calibration, is obtained by subtracting a weight of a container from a total weight including the weight of the container filled with the food.

21. The microwave oven control method according to claim 19, wherein the storing the calculated weight of the food is performed through a setting operation.

22. The microwave oven control method according to claim 21, wherein the operation of storing the calculated weight of the food is performed so that a change of the weight of the food is sensed even if the setting operation is not performed and the storing is carried out depending on the changed weight of the food.

23. The microwave oven control method according to claim 22, wherein the change of the weight of the food represents a change over a time greater than or equal to a preset reference time within a preset reference range.

24. The microwave oven control method according to claim 18, further comprising:
counting a time in which the cooking start is not set; and
deleting the stored weight of the food to prevent a malfunction if the counted time exceeds a preset time.

25. A microwave oven having a platform unit installed on an external portion of the microwave oven, said microwave oven comprising:
a weight sensing unit to sense weight of an object place on the weight sensing unit; and
a memory, couple to the weight sensing unit, to store the weight of the object.

26. A method of controlling a microwave oven, comprising:
sensing, via a weight sensing unit, weight of an object placed on a platform unit external to the microwave oven; and
storing the sensed weight of the object in a memory internal to the microwave oven.

27. The method of claim 26, further comprising:
detecting a cooking time for the object based on the sensed weight stored in the memory.